

CLAIMS

1. A heat-resistant cast steel excellent in aged ductility and creep rupture strength for hydrogen producing reaction tubes which is characterized in that the cast steel comprises, in mass %, 0.1 to 0.5% of C, up to 2.5% of Si, up to 2.5% of Mn, 15 to 26% of Cr, 8 to 23% of Ni, 0.1 to 1.2% of Nb, 0.01 to 1.0% of Ti, 0.001 to 0.15% of Ce, up to 0.06% of N and the balance substantially Fe, the cast steel being 20 to 45 in the parameter value P represented by the following expression:

$$P = 89.3 - 78.4C + 0.1Si - 5.7Mn - 1.7Cr \\ + 0.01Ni + 2Nb + 5.3Ti - 36.5N - 50.8Ce.$$

2. The heat-resistant cast steel for hydrogen producing reaction tubes according to claim 1 which further contains one or at least two elements selected from among 0.001 to 0.05% of B, 0.01 to 0.5% of Zr and 0.001 to 0.15% of La.

3. The heat-resistant cast steel for hydrogen producing reaction tubes according to claim 1 or 2 which further contains 0.01 to 0.3% of Al.

20 4. The heat-resistant cast steel for hydrogen producing reaction tubes according to any one of claims 1 to 3 which contains 0.1 to 0.3% of C.

5. The heat-resistant cast steel for hydrogen producing reaction tubes according to any one of claims 1 to 4 which 25 contains 15 to 20% of Cr and 8 to 18% of Ni.